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ABSTRACT

Concern about typical early identification procedures used with kindergarten children to predict potential reading failure is expressed in this paper. A diagnostic procedure for screening kindergarten children and then prescribing an individualized program for each child is described. The screening battery--Prediction with Diagnostic Qualities (PDQ)--consists of nine tests: auditory discrimination, listening comprehension, general vocabulary, ability to categorize, knowledge of relationship words, picture sequencing, oral language development, and the abilities to follow oral directions and to use oral context. Children are also tested for visual and auditory acuity. Now being tested, the effectiveness of the PDQ diagnostic procedure in terms of reading achievement will not be known for another year, but the teachers using the approach already report an impact on the kindergarten program in terms of greater specificity and individualization from the beginning of the year. By using a diagnostic rather than a predictive screening instrument, it is possible to diagnose for necessary skills and to provide instruction at each child's level of language development. (TO)

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"Kindergarten Screening Procedures: Early Identification or Merely Early Labeling?"

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"Early Identification" is a term not new in education. Few, if any, educators would quarrel with the need for identifying, as early as possible, children who might experience difficulty in learning to read. On the other hand, this educator would quarrel with the methods of identification and the results of such identification in far too many of the procedures currently available.

Too often identification procedures are nothing more than successful attempts at "predicting reading failure." They become nothing more than good examples of the self-fulfilling prophecy: (1) children are tested in areas which correlate with reading achievement; (2) those who score low are given "readiness" activities unrelated to actual reading; and (3) follow-up testing for reading achievement reveals that the children identified as "poor risks" did indeed fail.

Fry (7) demonstrated how effectively teachers can minimize reading achievement by keeping children from experiencing print. Book (2) demonstrated the entire sequence of the self-fulfilling prophecy by testing children, assigning them to various levels on the basis of test scores, and then verifying the failure predicted by the tests.

Rather than congratulate themselves on such successful prediction of failure, educators should be angry that the failure was not prevented. It is time to move from the crystal-ball gazing of prediction to the diagnostic action of prevention!

Correlation = Prediction

One of the problems that has led to the emphasis on prediction in education is the fact that educators have had to rely too heavily on

correlation. Sometimes, in the process, the implication of correlation is forgotten: the fact that two items correlate merely means that they tend to fluctuate together; the fact that they correlate does not mean that one causes the other to fluctuate. For example, there is a good correlation between grade-in-school and reading achievement, but one cannot put a kindergarten child into eighth grade to make him read better!

Studies by de Hirsch and Jansky (4, 11) should help to make those interested in early identification reconsider the value of correlational items. These authors investigated thirty-seven different tests in their preliminary study and correlated all of these with reading achievement of the children tested. While there was a statistically significant correlation between most of the tests and the reading achievement of the children, only two tests reached a correlation above .50. This correlation, the best of the tests used, is only about 13% better than chance! Should children be assigned to success or failure on such questionable odds!

In their report, de Hirsch and Jansky did help lay to rest some of the items too often assumed to relate to reading success or failure. Among these were chronological age, mental age, socio-economic status, and reading readiness tests. Correlations in these areas result in a forecasting ability that is somewhere between seven and twenty percent better than chance.

Worse than the weakness of their predictive ability, how are such items to be used by a teacher? Usually they can be used only to avoid instruction in reading until a child reaches a higher level. Too often information such as low socio-economic level can be used as an excuse for lack of instruction.

Of the thirty-seven tests investigated by de Hirsch and Jansky, knowledge of letter names was the best predictor of reading success. Durrell (5), in reporting the high predictive value of this simple test, found it at least as effective as a commercial readiness test. On the other hand, here again the test merely predicts, since knowledge of letter names is not necessary in order to learn to read. In fact, Muehl (14) reported that too much drill on letter names was a handicap to children he investigated: those children had a tendency to go through an intermediate step of naming the first letter before beginning to say the word. Since half the consonant letters have names which do not begin with the sound those letters represent, such naming detracts from immediate calling of the word.

Other items often used for prediction include the ability to copy forms and other kinds of visual-motor tests. Here again, while the correlation between scores on these kinds of tests and future reading success is modest at best, the important point is that they offer no direction for instruction. A number of studies, such as those of Balow (1), Cohen (3), and Jensen (12), have demonstrated that visual-motor activities contributed nothing to reading success. On this point, Hammill (8) even raised the question as to whether these activities contribute to increased visual-motor skill.

Diagnosis = Prevention

If teachers are concerned about preventing reading failure rather than merely predicting it, then it is time to move from early identification tests which rely on correlation for their effectiveness. It is time to move to tests which diagnose strengths and weaknesses that contribute to reading success or failure.

Prerequisites for success in reading, as this author sees them, are those items which enable the individual to function in the language he will be expected to read. This implies both a receptive and an expressive command of oral English, its vocabulary and syntax, which--in turn--presumes the ability to hear differences in sounds in words. Further, it implies that the individual is able to think in the language, i.e., to use the language to comprehend ideas and to express ideas. Finally, the individual must have adequate visual and auditory acuity, plus the general physical health which will enable the energy necessary for learning.

In terms of early identification, this view suggests that children be diagnosed for these abilities. Those who have them can move forward into more specific reading skills; those who do not have the prerequisites need intensive instruction in what they are lacking. Certainly this is not a new thought in education, and it should not be a new thought in early education: the task is to identify where the child is and to begin instruction at that point!

Diagnostic Procedures for Early Identification

In 1974, Hillerich (9) developed a battery of tests to be used with beginning kindergarten children. The intent was not to screen the children for placement, but to diagnose their language needs for greater individualization in the kindergarten. Items selected were criterion referenced, each with its own direct implications for instruction. In contrast to many lengthy procedures, the entire battery took only fifteen minutes per child to administer.

The battery, called PDQ ("Prediction with Diagnostic Qualities"), was piloted in September, 1974, in a blue-collar community with 153 entering kindergarten children. On the basis of the pilot, it was revised slightly to ease administration.

During 1974-76, PDQ is being used in a research study with 916 children in three school districts. Supported by a grant from the Edyth Bush Charitable Foundation, the study will test the effectiveness of this procedure in improving reading achievement of the children involved.

The battery consists of nine tests: Auditory Discrimination, Listening Comprehension, General Vocabulary, Ability to Categorize, Knowledge of Relationship Words, Picture Sequencing, Oral Language Development, and the Ability to Follow Oral Directions and to Use Oral Context. Children were also tested for visual acuity, including near-point vision, and for auditory acuity.

This author is convinced that the Auditory Discrimination test is unnecessary for an English-speaking child, since children learn to speak their native language only by listening and imitating. Any four-year-old who speaks his native language has already demonstrated the ability to discriminate the difference of one phoneme in a word: he knows if he is being asked for milk or silk, for a pin or a pen. Users of the Wepman Auditory Discrimination Test (17) would disagree, but the basis for disagreement seems to lie in the method of testing. Flower (6) reported that auditory memory seems to be the main factor tested by the Wepman. Further, the Wepman test ignores the fact that young children don't always understand "same" and "different" as applied to spoken words.

To avoid these kinds of problems, PDQ made use of picture pairs. Children were told the names of two pictures, e.g., shoe, Sue, and then asked to point to one. In comparisons with Wepman results, the picture test resulted in about one tenth as many errors on the same contrasts as were found with the Wepman. Further, it became clear that children with immature speech, i.e., those who called a ring "a wing," could discriminate auditorily; their's was an expressive, not a receptive problem.

Preliminary Results of Kindergarten Screening

During August and early September, 1974, 916 entering kindergarten children were tested with PDQ. While the effect on their reading achievement will not be known until they are compared with control groups in May, 1976, certain effects have already been noted.

In terms of the testing procedure itself, kindergarten teachers reported that it was probably the best introduction to school that they have ever provided for kindergarten children. The child had the undivided attention of the teacher while he played "games" at which, in his own eyes, he could not fail. Among the entire group on the first day of kindergarten, as contrasted with previous years, teachers experienced only a case or two of separation or crying problems.

While the existing kindergarten programs were already up-to-date, including provision for reading instruction for some children, kindergarten teachers found many of the children much more advanced than they had assumed their children to be. As a result, they adjusted the kindergarten program for these children. But they also found a few children so much less prepared than they had assumed all children to be! For these, the program also had to be adjusted. As a result, PDQ served its first

purpose, i.e., to provide for greater individualization in the kindergarten.

Averages are of no more concern than are norms when one seeks to individualize. However, for the reader, Table 1 summarizes the averages for each of the subtests.

Table 1. Results of FDQ Testing, September, 1974

(N = 916)

Subtest	Average Score	Possible Score
Auditory Discrimination	37	39
Listening Comprehension	4.0	6.0
Oral Language Development	5.2 words/ T-unit	---
General Vocabulary	31.2	36
Relationship Words	12	13
Ability to Categorize	3.9	6.0
Sequencing	48%	100%
Following Oral Directions	11	12
Using Oral Context	6.6	7.0

As shown in Table 1, few children had difficulty in Auditory Discrimination, Relationship Words, Following Oral Directions, or Using Oral Context. Oral Language Development, as measured by number of words per T-unit (10), was typical for this age when compared with results reported by Templin (16), Loban (13), and O'Donnell (15).

Many of the children needed experiences in the other areas. In order to encourage proper follow-up of the testing, kindergarten teachers

were provided with an extensive list of activities which could be used to develop each of the skills tested. These were used, individually and in small groups, to further individualize the program for children in the kindergartens.

Summary

This article has reported the rationale for a concern about typical "early identification" procedures and has suggested a procedure for individualizing kindergarten through diagnostic testing. Effectiveness of the diagnostic approach in terms of reading achievement will not be known for a year, but kindergarten teachers have already reported an impact on the kindergarten program in terms of greater specificity and individualization from the beginning of the year.

The author holds no brief for the specific test items used in PDQ; anyone can take each subtest title and develop exercises to see if a child can or can not perform on that item. The author is, however, firmly bound to the direction implied by PDQ: it is time to stop assigning children to failure through predictive kinds of tests; it is time to diagnose for necessary skills and to provide instruction at each child's level of language development.

(Activities implied by PDQ tests are available from the author on request. Send stamped, self-addressed envelope, please.)

References

1. Balow, Bruce and Pearl Buckland. "Effect of Visual Perceptual Training on Reading Achievement," Exceptional Child, (January, 1973), 299-304.

2. Book, Robert. "Predicting Reading Failure: A Screening Battery for Kindergarten Children," Journal of Learning Disabilities, (January, 1974), 52-56.

3. Cohen, S. Alan. "Studies in Visual Perception and Reading in Disadvantaged Children," Journal of Learning Disabilities, (October, 1969), 498-503.

4. de Hirsch, Katrina and Jeannette Jansky. Predicting Reading Failure. New York: Harper, 1966.

5. Durrell, Donald, et al. "Success in First Grade Reading," Journal of Education, (February, 1958), entire issue.

6. Flower, Richard. "The Evaluation of Auditory Abilities in the Appraisal of Children with Reading Problems," in Perception and Reading. Newark: International Reading Association, 1968, 21-24.

7. Fry, Edward. "Are Reading Readiness Materials Necessary in the First Grade?" Paper presented at American Educational Research Association, February, 1965.

8. Hammill, Donald, et al. "Visual-Motor Processes: Can We Train Them?" The Reading Teacher, (February, 1974), 469-478.

9. Hillerich, Robert. Prediction with Diagnostic Qualities: A Diagnostic Approach to Early Identification of the Pre-Reading Language Needs for Four- and Five-Year-Olds. Wilmette: Eduscope, Inc., 1974.

10. Hunt, Kellogg. Grammatical Structures Written at Three Grade Levels. Champaign: National Council of Teachers of English, 1965.

11. Jansky, Jeannette and Katrina de Hirsch. Preventing Reading Failure. New York: Harper, 1972.

12. Jensen, Norma and Ethel King. "Effects of Different Kinds of Visual Motor Discrimination Training on Learning to Read Words," Journal of Educational Psychology, (April, 1970), 90-96.

13. Loban, Walter. The Language of Elementary School Children. Champaign: National Council of Teachers of English, 1963.

14. Muehl, Sigmar. "The Effects of Letter-Name Knowledge on Learning to Read a Word List in Kindergarten Children," Journal of Educational Psychology, (August, 1962), 181-186.

15. O'Donnell, Roy, et al. Syntax of Kindergarten and Elementary School Children. Champaign: National Council of Teachers of English, 1967.

16. Templin, Mildred. Certain Language Skills in Children: Their Development and Interrelationships. Minneapolis: University of Minnesota Press, 1957.

17. Wepman, Joseph. Auditory Discrimination Test. Chicago: Joseph Wepman, 1958.